

# City of Memphis

## Asset Allocation Comparison as of June 30, 2022

\$2,406,820

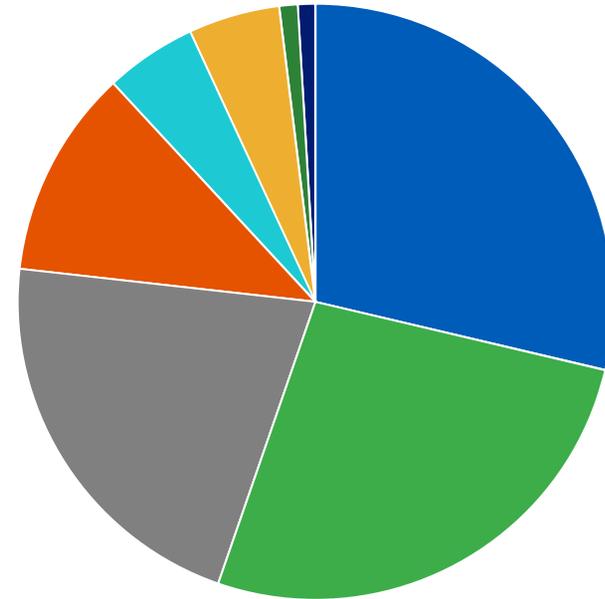
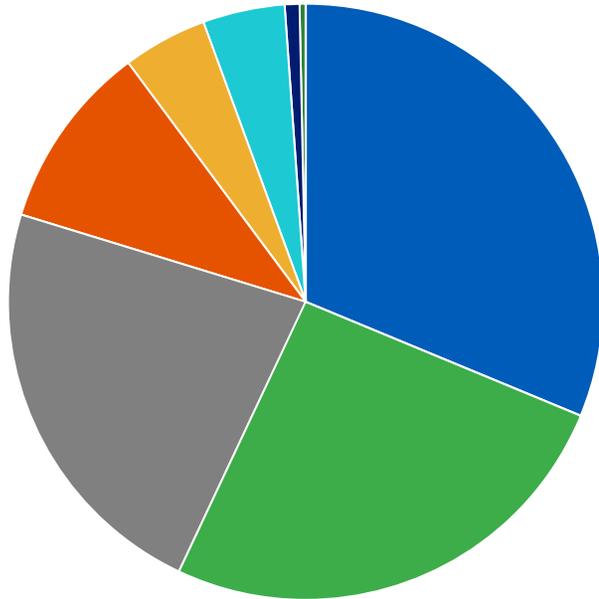
<u>Target Allocations</u>		<u>Current Managers &amp; Allocations</u>			<u>Difference</u>	<u>Range</u>	
<b>Equity</b>							
Large Cap Equity	20.00%	\$481,364 <sup>(000)</sup>	Barrow, Hanley (large cap value)	6.56%	\$157,799 <sup>(000)</sup>	0.14%	15%-25%
			Rhumbline Russell 1000 Growth (large cap growth)	3.01%	\$72,430		
			Winslow (large cap growth)	2.83%	\$68,198		
			Rhumbline S&P 500 (large cap core)	7.74%	\$186,229		
Mid/SMID Cap Equity	4.00%	\$96,273	Northern Trust (mid cap core)	2.28%	\$54,986	0.40%	0%-7%
			Capital Prospects SMID Cap*	2.11%	\$50,862		
Small Cap Equity	4.00%	\$96,273	Capital Prospects Small Cap Value*	2.20%	\$52,983	0.15%	0%-7%
			Conestoga (small cap growth)	1.06%	\$25,535		
			Nicholas (small cap growth)	0.88%	\$21,249		
<b>Domestic Equity</b>	<b>28.00%</b>	<b>\$673,910</b>	<b>Domestic Equity</b>	<b>28.68%</b>	<b>\$690,272</b>	<b>0.68%</b>	<b>18%-38%</b>
Developed International	15.00%	\$361,023	1607 Capital Partners	3.94%	\$94,737	-0.77%	10%-20%
			Principal Global Investors	4.17%	\$100,325		
			Marathon Asset Mgmt	3.86%	\$92,819		
			Strategic Global Advisors	2.27%	\$54,548		
Emerging Markets	7.00%	\$168,477	Acadian	3.96%	\$95,330	0.23%	5%-12%
			JPMorgan	3.27%	\$78,795		
<b>International</b>	<b>22.00%</b>	<b>\$529,500</b>	<b>International</b>	<b>21.46%</b>	<b>\$516,554</b>	<b>-0.54%</b>	<b>15%-30%</b>
<b>Equity Total</b>	<b>50.00%</b>	<b>\$1,203,410</b>	<b>Equity Total</b>	<b>50.14%</b>	<b>\$1,206,825</b>	<b>0.14%</b>	
<b>Fixed Income</b>							
Core Fixed Income	13.00%	\$312,887	PIMCO	5.87%	\$141,378	-0.93%	8%-18%
			Prudential Core Conserv Bond	6.19%	\$149,032		
Global Fixed Income	8.00%	\$192,546	Brandywine	8.61%	\$207,112	0.61%	3%-13%
Global High Yield	5.00%	\$120,341	Mackay Shields	5.95%	\$143,324	0.95%	2%-10%
<b>Fixed Income Total</b>	<b>26.00%</b>	<b>\$625,773</b>	<b>Fixed Income Total</b>	<b>26.63%</b>	<b>\$640,846</b>	<b>0.63%</b>	<b>18%-34%</b>

<u>Target Allocations</u>		<u>Current Managers &amp; Allocations</u>		<u>Difference</u>	<u>Range</u>
<b><u>Real Estate</u></b>					
Core/Value Add/REITs	10.00%	\$240,682	BlackRock US Core Property Fund	3.35%	\$80,561
			RREEF REIT II	0.90%	\$21,664
			Vanguard REIT Index	0.63%	\$15,227
			TA Realty Core Property Fund	1.38%	\$33,107
			Long Wharf Real Estate Partners IV	0.05%	\$1,153 (Total Commitment \$20M, Total Drawn \$21.5M, Total Distributed \$29.5M)
			Long Wharf Real Estate Partners Fund V	0.53%	\$12,787 (Total Commitment \$20M, Total Drawn \$20.0M, Total Distributed \$14.4M)
			Long Wharf Real Estate Partners Fund VI	0.46%	\$11,064 (Total Commitment \$20M, Total Drawn \$14.2M, Total Distributed \$6.8M)
			Cornerstone (Barings) Real Estate Fund X <sup>1</sup>	0.21%	\$5,025 (Total Commitment \$10M, Total Drawn \$8.3M, Total Distributed \$7.4M)
			Green Cities III	0.72%	\$17,336 (Total Commitment \$20M, Total Drawn \$23.7M, Total Distributed \$10.7M)
			Green Cities IV	0.51%	\$12,200 (Total Commitment \$20M, Total Drawn \$12.7, Total Distributed \$1.1M)
			TA Realty Fund XI	0.93%	\$22,441 (Total Commitment \$20M, Total Drawn \$20.0M, Total Distributed \$15.9M)
			Mesirov Financial Real Estate Value Fund III	1.11%	\$26,815 (Total Commitment \$20M, Total Drawn \$22.2M, Total Distributed \$6.7M)
			Dune Real Estate Partners Fund IV	0.56%	\$13,577 (Total Commitment \$30M, Total Drawn \$13.9M, Total Distributed \$0.5M)
			<i>Green Cities V (\$20M Commitment)</i>		
			<i>Long Wharf Real Estate Partners VII (\$20M Commitment)</i>		
			<i>TA Realty Fund XII (\$30M Commitment)</i>		
<b>Real Estate Total</b>	<b>10.00%</b>	<b>\$240,682</b>	<b>Real Estate Total</b>	<b>11.34%</b>	<b>\$272,958</b>
				<b>1.34%</b>	<b>5%-15%</b>
<b><u>Private Equity</u></b>					
Private Equity	5.00%	\$120,341	Pantheon Global Secondary Fund V	1.54%	\$36,992 (Total Commitment \$50M, Total Drawn \$38.7M, Total Distributed \$28.1M)
			SSM Growth Equity Fund II*	0.29%	\$7,042 (Total Commitment \$10M, Total Drawn \$9.2, Total Distributed \$5.3M)
			SSM Growth Equity Fund III*	0.44%	\$10,559 (Total Commitment \$10M, Total Drawn \$9.3, Total Distributed \$0.8M)
			Neuberger Berman Crossroads XXI	2.71%	\$65,177 (Total Commitment \$50M, Total Drawn \$36.5M, Total Distributed \$18.2M)
			<i>Neuberger Berman Crossroads XXIV (\$40M commitment)</i>		
			<i>Siguler Guff Buyout Fund V (\$20M commitment)</i>		
<b>Private Equity Total</b>	<b>5.00%</b>	<b>\$120,341</b>		<b>4.98%</b>	<b>\$119,770</b>
				<b>-0.02%</b>	<b>3%-7%</b>
<b><u>Private Credit</u></b>					
	5.00%		Brightwood Capital Fund V	0.17%	\$4,164 (Total Commitment \$10M, Total Drawn \$4.0, Total Distributed \$0.0M)
			Churchill Middle Market Senior Loan Fund III	0.26%	\$6,372 (Total Commitment \$10M, Total Drawn \$9.1, Total Distributed \$2.9M)
			Neuberger Berman Private Debt Fund IV	0.51%	\$12,172 (Total Commitment \$30M, Total Drawn \$16.5, Total Distributed \$5.2M)
<b>Private Credit Total</b>	<b>5.00%</b>	<b>\$120,341</b>		<b>0.94%</b>	<b>\$22,708</b>
				<b>-4.06%</b>	<b>3%-7%</b>
<b><u>Hedge Fund of Funds</u></b>					
	4.00%		Aetos	2.19%	\$52,672
			Grosvenor	2.28%	\$54,992
			Preserver, LP*	0.49%	\$11,788
<b>Hedge Fund of Funds Total</b>	<b>4.00%</b>	<b>\$96,273</b>		<b>4.96%</b>	<b>\$119,452</b>
				<b>0.96%</b>	<b>2%-6%</b>
Internal Account	0.00%	\$0	Internal Account	1.01%	\$24,261
<b>Cash</b>	<b>0.00%</b>	<b>\$0</b>	<b>Cash</b>	<b>1.01%</b>	<b>\$24,261</b>
				<b>1.01%</b>	<b>0%-5%</b>
<b>Total</b>	<b>100%</b>	<b>\$2,406,820</b>	<b>Total</b>	<b>100%</b>	<b>\$2,406,820</b>

<sup>1</sup> Cornerstone Real Estate Advisers now operates under the investment adviser name "Barings Real Estate Advisers," however; all predecessor funds retain the name Cornerstone. All new products open to new investors will operate under the name "Barings Real Estate Advisers."

March 31, 2022 : \$2,681,340,864

June 30, 2022 : \$2,406,820,214

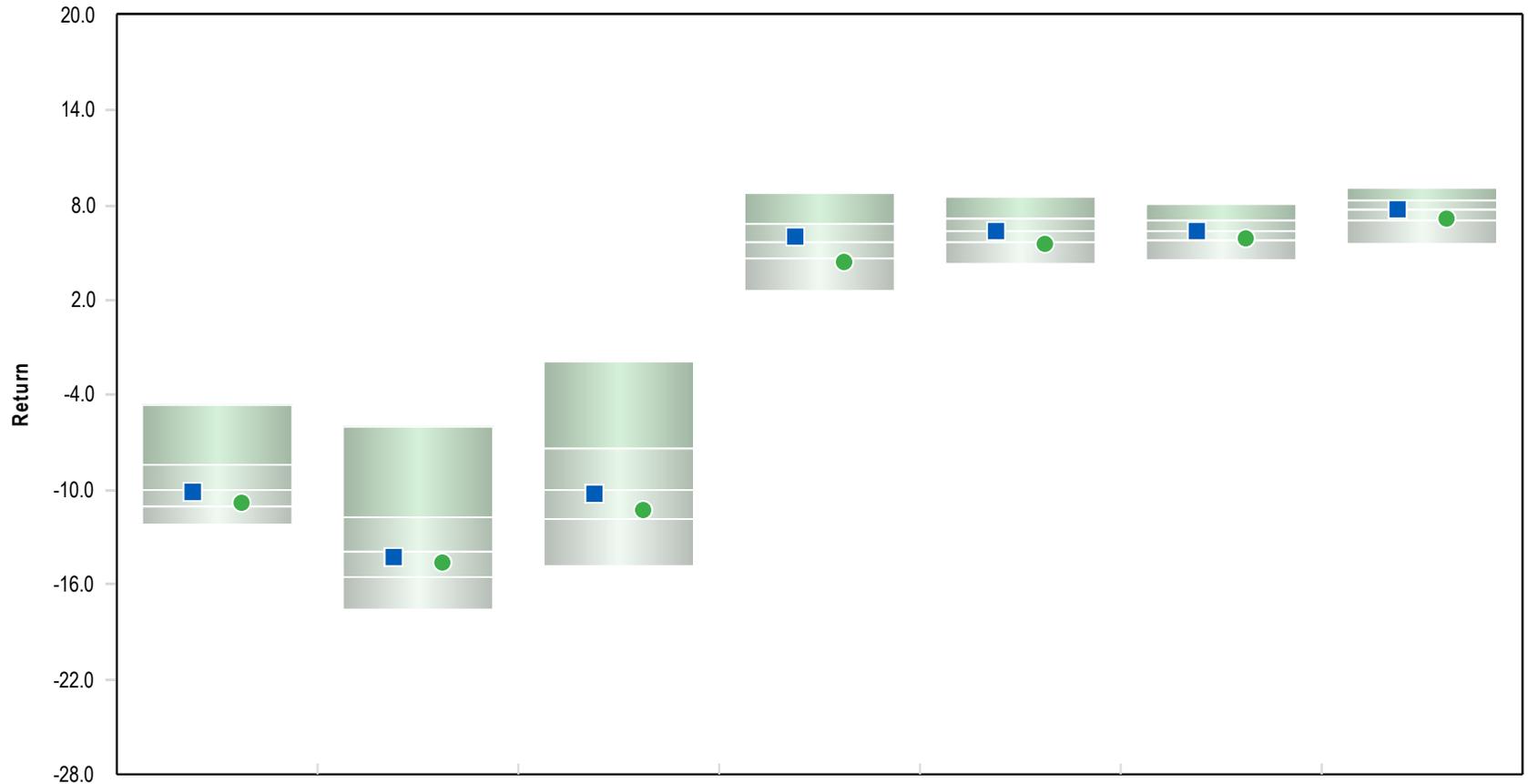


	Market Value (\$)	Allocation (%)
Domestic Equity Composite	837,640,596	31.2
Fixed Income Composite	691,079,351	25.8
International Equity Composite	609,025,642	22.7
Total Real Estate Composite	270,547,888	10.1
Hedge Fund Composite	123,024,934	4.6
Private Equity Composite	119,769,627	4.5
Private Debt Composite	21,035,691	0.8
In House Cash	9,217,135	0.3

	Market Value (\$)	Allocation (%)
Domestic Equity Composite	690,271,618	28.7
Fixed Income Composite	640,845,814	26.6
International Equity Composite	516,553,786	21.5
Total Real Estate Composite	272,957,734	11.3
Private Equity Composite	119,769,627	5.0
Hedge Fund Composite	119,452,149	5.0
In House Cash	24,261,210	1.0
Private Debt Composite	22,708,276	0.9

	<u>Performance (%)</u>								
	<u>1 Quarter</u>	<u>Year To Date</u>	<u>1 Year</u>	<u>3 Years</u>	<u>5 Years</u>	<u>7 Years</u>	<u>10 Years</u>	<u>Since Inception</u>	<u>Inception Date</u>
<b>Total Fund Composite</b>	<b>-10.07</b>	<b>-14.25</b>	<b>-10.26</b>	<b>5.99</b>	<b>6.36</b>	<b>6.40</b>	<b>7.79</b>	<b>9.21</b>	<b>10/01/1982</b>
<i>Policy Index</i>	-10.49	-14.30	-11.02	4.58	5.63	5.96	7.17	9.50	
<b>In House Cash</b>	<b>0.13</b>	<b>0.16</b>	<b>0.19</b>	<b>0.47</b>	<b>0.98</b>	<b>0.80</b>	<b>0.60</b>	<b>3.86</b>	<b>10/01/1982</b>
<i>90 Day U.S. Treasury Bill</i>	0.11	0.15	0.17	0.63	1.11	0.87	0.63	3.63	
<b>Domestic Equity Composite</b>	<b>-15.55</b>	<b>-20.77</b>	<b>-13.91</b>	<b>9.86</b>	<b>10.65</b>	<b>9.73</b>	<b>12.06</b>	<b>11.73</b>	<b>10/01/1982</b>
<i>Russell 3000 Index</i>	-16.70	-21.10	-13.87	9.77	10.60	10.43	12.57	11.53	
<i>Domestic Equity Index</i>	-16.65	-21.40	-15.81	8.48	9.46	9.56	11.97	N/A	
<b>Fixed Income Composite</b>	<b>-7.26</b>	<b>-10.87</b>	<b>-11.31</b>	<b>0.02</b>	<b>1.57</b>	<b>2.32</b>	<b>2.58</b>	<b>6.92</b>	<b>10/01/1982</b>
<i>Fixed Income Index</i>	-7.02	-12.27	-12.45	-1.52	0.62	1.38	1.88	6.72	
<b>International Equity Composite</b>	<b>-15.16</b>	<b>-22.90</b>	<b>-23.36</b>	<b>2.50</b>	<b>3.28</b>	<b>4.31</b>	<b>6.90</b>	<b>5.00</b>	<b>01/01/1990</b>
<i>International Equity Index</i>	-13.57	-18.95	-20.09	1.04	2.29	2.84	4.99	4.72	
<b>Hedge Fund Composite</b>	<b>-2.90</b>	<b>-6.28</b>	<b>-3.10</b>	<b>4.84</b>	<b>4.23</b>	<b>N/A</b>	<b>N/A</b>	<b>5.00</b>	<b>04/01/2016</b>
<i>90-Day T-Bill+ 5%</i>	1.33	2.62	5.18	5.66	6.17	5.92	5.66	6.02	
<i>HFRI FOF: Conservative Index</i>	-1.53	-1.38	0.28	4.70	4.07	3.13	3.84	4.16	
<b>Core Private Real Estate Composite</b>	<b>2.30</b>	<b>8.30</b>	<b>25.00</b>	<b>13.02</b>	<b>10.84</b>	<b>10.76</b>	<b>10.91</b>	<b>8.98</b>	<b>09/01/1999</b>
<i>NCREIF Property Index</i>	3.23	8.72	21.44	10.22	8.86	8.84	9.67	9.12	

	<u>Performance (%)</u>									
	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
<b>Total Fund Composite</b>	<b>13.57</b>	<b>15.06</b>	<b>18.86</b>	<b>-5.39</b>	<b>18.36</b>	<b>6.76</b>	<b>0.24</b>	<b>5.49</b>	<b>17.71</b>	<b>13.75</b>
<i>Policy Index</i>	11.37	12.73	18.81	-4.51	16.68	8.04	-0.19	5.86	15.19	12.79
<b>In House Cash</b>	<b>0.04</b>	<b>0.26</b>	<b>2.12</b>	<b>1.93</b>	<b>0.67</b>	<b>0.35</b>	<b>0.18</b>	<b>0.11</b>	<b>0.11</b>	<b>0.20</b>
<i>90 Day U.S. Treasury Bill</i>	0.05	0.67	2.28	1.87	0.86	0.25	0.03	0.04	0.05	0.08
<b>Domestic Equity Composite</b>	<b>25.47</b>	<b>22.41</b>	<b>30.07</b>	<b>-5.88</b>	<b>22.62</b>	<b>10.04</b>	<b>-1.26</b>	<b>8.80</b>	<b>35.55</b>	<b>16.30</b>
<i>Russell 3000 Index</i>	25.66	20.89	31.02	-5.24	21.13	12.74	0.48	12.56	33.55	16.42
<i>Domestic Equity Index</i>	23.52	20.08	29.94	-6.47	20.20	13.76	0.19	11.60	34.04	16.47
<b>Fixed Income Composite</b>	<b>-0.36</b>	<b>9.51</b>	<b>9.88</b>	<b>-0.98</b>	<b>6.94</b>	<b>5.14</b>	<b>-0.23</b>	<b>4.70</b>	<b>0.13</b>	<b>8.15</b>
<i>Fixed Income Index</i>	-1.25	7.78	9.24	-0.91	5.50	4.83	-0.86	4.89	0.39	6.87
<b>International Equity Composite</b>	<b>9.15</b>	<b>17.83</b>	<b>24.67</b>	<b>-15.52</b>	<b>33.29</b>	<b>3.30</b>	<b>-0.50</b>	<b>-1.08</b>	<b>20.79</b>	<b>20.28</b>
<i>International Equity Index</i>	6.91	11.18	20.95	-13.99	28.77	3.16	-4.06	-4.13	16.58	17.70
<b>Hedge Fund Composite</b>	<b>7.59</b>	<b>11.20</b>	<b>7.95</b>	<b>-1.55</b>	<b>6.72</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<i>90-Day T-Bill+ 5%</i>	5.05	5.70	7.39	6.97	5.90	5.27	5.03	5.04	5.05	5.08
<i>HFRI FOF: Conservative Index</i>	7.62	6.47	6.30	-0.87	4.12	1.89	0.37	3.14	7.70	4.22
<b>Core Private Real Estate Composite</b>	<b>25.04</b>	<b>2.55</b>	<b>10.16</b>	<b>4.91</b>	<b>7.75</b>	<b>8.50</b>	<b>11.92</b>	<b>20.06</b>	<b>7.12</b>	<b>14.60</b>
<i>NCREIF Property Index</i>	17.70	1.60	6.42	6.72	6.96	7.97	13.33	11.82	10.98	10.54



	1 Qtr	YTD	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
■ Total Fund Composite	-10.07 (52)	-14.25 (56)	-10.26 (54)	5.99 (42)	6.36 (52)	6.40 (49)	7.79 (47)
● Policy Index	-10.79 (71)	-14.59 (62)	-11.32 (66)	4.46 (82)	5.56 (78)	5.91 (71)	7.14 (71)
5th Percentile	-4.68	-5.99	-1.90	8.83	8.59	8.07	9.11
1st Quartile	-8.46	-11.72	-7.41	6.79	7.17	7.06	8.32
Median	-10.00	-13.92	-10.04	5.65	6.40	6.37	7.72
3rd Quartile	-11.06	-15.56	-11.89	4.71	5.67	5.81	7.02
95th Percentile	-12.24	-17.55	-14.82	2.60	4.27	4.56	5.51

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.